

AMENDMENT TO THE SPECIFICATION

Please replace paragraph [0045] with the following paragraph:

[0045] In a particularly preferred aspect of the present invention, the spring member 34 is disposed within the barrel 21 so as to form a direct electrical path between a case electrode 35 of an adjacent battery 31 and the inner surface 30 of the barrel 21. In alternative implementations of the invention, however, spring member 34 may also, or in the alternative, form an electrical path between the tail cap 22 and case electrode 35 of the rearmost battery 31.

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Please replace paragraph [0049] with the following paragraph:

[0049] As best seen in FIGS. 7 and 8, switch 40 comprises the first conductor 39, a lower insulator ~~receptacle~~ 41, a second conductor 42, and an upper insulated retainer 48.

Please replace paragraph [0050], which was previously amended by Response Under 37 CFR §1.111 filed on April 8, 2003, with the following paragraph:

[0050] Referring to FIGS. 3, 4, and 6-10, lower insulator ~~receptacle~~ 41 includes a sidewall 43 that defines a right circular cylinder. The diameter of the cylindrical wall defined by the

sidewall 43 is dimensioned so that the lower insulator 41 may slide up and down against the inner surface 30 of barrel 21 without binding. At the same time, the diameter of the lower insulator is sufficient to prevent side-to-side movement of the lower insulator within the barrel. In addition, the lower insulator is preferably of sufficient length to prevent it from tilting with respect to the barrel. As a result of the foregoing arrangement, lower insulator 41 and barrel 21 will remain coaxial with respect to one another.

Please replace paragraph [0058] with the following paragraph:

[0058] The end of base arm 61 opposite loop 65 may be secured to lower insulator 41 with the aid of tab 71. For example, as best seen in FIG. 10, tab 71 may be sized to engage the inner surface of sidewall 43 to frictionally hold the base arm to lower insulator ~~receptacle~~ 41. Thus, by appropriately dimensioning base arm 61 and tab 71, the end of conductor 39 opposite loop 65 may also be mechanically fastened within recess 45 while still permitting leaf spring arm 63 to be freely compressed.

Please replace paragraph [0068] with the following paragraph:

[0068] Absent further assembly, the lower insulator ~~receptacle~~ 41 is urged to move in the direction indicated by the arrow 36, by

the action of the spring member 34, until barrel contacts 88 come into contact with lip 95 of the barrel 21. To minimize resistance and maximize contact area, lip 95 is preferably angled at the same angle as beveled edge 99 with respect to the central axis of the flashlight. In addition, lip 95 and edge 99 preferably form an acute angle with respect to the central axis of the flashlight so that the contact area of contacts 88 can be increased for a given distance that lip 95 extends radially in towards the axis of the flashlight.

Please replace paragraph [0069] with the following paragraph:

[0069] Upper insulated retainer 48 is partially disposed external to the end of the barrel 21 whereat the lower insulator ~~receptacle~~ 41 is installed. Retainer 48 is configured to attach to lower insulator 41 and to prevent axial movement of the lower insulator 41 in a direction opposite arrow 36 beyond a predetermined distance from lip 95. Thus, insulated retainer 48 keeps lower insulator 41 from falling to the rear of barrel 21, and potentially out the tail end of the flashlight, in the absence of batteries 31 being installed in the flashlight. In addition, the rearward facing surface 108 of retainer 48 is adapted to press the central body portion 89 of conductor 42 firmly against the forward

surface of the lower insulator, and the forward facing surface is adapted to engage reflector 101. By pushing the central body portion 89 against the forward recessed surface, the upper insulated retainer 48 also pulls the barrel contacts 88 firmly against beveled edge 99. As a result, switch 40 will only activate, as will be more fully described below, when head assembly 23 is rotated by a desired amount relative to barrel 21.

Please replace paragraph [0071] with the following paragraph:

[0071] A plurality of extensions, or legs, 109 extend from the rear-facing surface 108 of the annular body for attaching retainer 48 to lower insulator 41. Three extensions are employed in the present embodiment, with each extension being spaced 120 degrees from the other extensions so as to be in alignment with and pass through holes 92 provided in each arm of the second conductor 42. In addition, extensions 109 are configured to mate with corresponding bores 111 provided in the lower insulator ~~receptacle~~ 41. Extensions 109 and bores 111 are preferably sized to provide an interference fit between the two. The interference fit may be sufficiently strong to prevent switch 40 from being dismantled without its destruction. However, the interference fit need only

be strong enough to keep switch 40 from coming apart during normal usage of the flashlight.

Please replace paragraph [0096] with the following paragraph:

[0096] When head 24 is fully screwed onto the barrel 21 by means of the threads 153, abutment 163 abuts against shoulder 113 of retainer 48, urging it in a direction counter to that indicated by arrow 36. The upper insulator receptacle 47 then pushes lamp base receiver 119 and the lower insulator ~~receptacle~~ 41 in the same direction, thereby providing a space between the barrel contacts 88 and the lip 95 on the forward end of the barrel 21. The second conductor 42 is thus separated from contact with the lip 95 of the barrel 21 as shown in FIG. 3A, and the electrical circuit is opened.

Please replace paragraph [0097] with the following paragraph:

[0097] Referring to FIG. 4, appropriate rotation of the head 24 about the axis of the barrel 21 causes the head assembly 23 to move in the direction of arrow 36 through the engagement threads 153. Upon reaching the relative position indicated in FIG. 4, the head assembly 23 has progressed a sufficient distance in the direction of arrow 36 such that the reflector 101 has moved a like distance enabling the retainer 48, the lamp base receiver 119, and the lower

insulator ~~receptacle~~ 41 to be moved by the urging of the spring member 34 translating the batteries 31 in the direction of the arrow 36, to the illustrated position. In this position, the barrel contacts 88 have been brought into contact with the lip 95 on the forward end of the barrel 21, which closes the electrical circuit.

Please replace paragraph [0099] with the following paragraph:

[0099] Referring to FIGS. 2, 3, 5 and 6, the tail cap assembly 28 according to one of the separate aspects of the present invention is now more fully described. Tail cap assembly 28 includes a spring member 34 that generally comprises a tapered coil spring. A base coil in spring member 34 is provided with an oval shape having a major diameter that is sufficient to allow the spring member 34 to be in direct contact with the inner surface 30 of barrel 21 when the tail cap assembly is inserted in barrel 21 as shown in FIG. 3. The minor diameter of the oval-shaped coil of spring member 34 is sized to be received by opposing ears 165 provided on the forward end of tail cap 22. Ears 165 act as a spring seat. In the present embodiment, ears 165 are curved to follow the circumference of the forward end of tail cap 22 and are provided with lips 167 on their opposing faces. Lips 167 are designed to retain spring member 34 to tail cap 22 while allowing

the major diameter of the oval-shaped coil to project out opposing openings formed between the ears 165 as best seen in FIG. 2. When the tail cap 22 is engaged to the barrel 21, the design of the spring member 34 allows for direct electrical contact between the case electrode 35 of the rearmost battery 31 and the inner surface 30 of the barrel 21. As a result, tail cap 22 may be eliminated from the electrical circuit of the flashlight. This in turn eliminates the need to machine or mask the tail cap if it is coated with a non-conductive coating, such as when the tail cap is anodized or painted. Furthermore, the number of parts required in comparison to currently known tail cap assemblies for flashlights that do not include the tail cap as part of the electrical circuit is reduced.

Please replace paragraph [0100] with the following paragraph:

[0100] Referring to FIGS. 3, 4, and 5 the electrical circuit of flashlight 20 according to the present embodiment of the invention will now be described. Electrical energy is conducted from the rearmost battery 31 through its center contact 37 which is in connection with the case electrode 36 of the forwardmost battery 31. Electrical energy is then conducted from the forwardmost battery 31 through its center electrode 38 to the first conductor

39 which is coupled to the lamp electrode 57. After passing through filament 60 of the lamp bulb 59 the electrical energy emerges through lamp electrode 58 which is coupled to the second conductor 42. When the head assembly 23 has been rotated about the threads 153 to the position illustrated by FIG. 3, the barrel contacts 88 of second conductor 42 do not contact the lip 95 of the barrel 21, thereby resulting in an open electrical circuit. However, when the head assembly 23 has been rotated about the threads 153 to the position illustrated in FIG. 4, the barrel contacts 88 of the second conductor 42 are now pressed against the lip 95 by the lower insulator ~~receptacle~~ 41 being urged in the direction of the arrow 36 by the spring member 34. In this configuration, electrical energy may then flow from the barrel conductor 42 into to the lip 95, through the barrel 21, and into the spring member 34, the spring member 34 being in electrical contact with the case electrode 35 of the rearmost battery 31. By rotating the head assembly 23 about the threads 153 such that the head assembly 23 moves in the direction counter to that indicated by the arrow 36, the head assembly 23 may be restored to the position illustrated in FIG. 3, thereby opening the electrical circuit and turning off the flashlight.